

Application No. 09/402,564
Response Dated February 15, 2006
Reply to FINAL Office Action of September 16, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled) – 7. (Cancelled).
8. (Previously Presented) Apparatus for making particles in the form of spheroids comprising a mixture of an active substance distributed within a thermoplastic material and having a constant diameter in the range from 0.5 to 2 mm, said apparatus comprising an extruder which in turn comprises an extrusion die and which is proper to produce extruded filaments of said mixture, said apparatus further comprising, located at the exit of the extrusion die, a tool, for chopping the extruded filaments, wherein said tool is equipped with cutters in the form of blades having a first and a second face parallel with one another, the first of which is inclined toward the second, thus forming a cutting edge, the second face being recessed so as to leave a strip of a width of less than 1mm which comprises the cutting edge whereby the shape of the particles obtained by chopping the extruded filaments is directly spheroidal without any additional spheroidal shaping step.
9. (Cancelled).
10. (Previously Presented) In a method of making particles, in particular spheroids intended to be used for preparing tablets, said particles which include an active substance having a constant diameter in the range from 0.5 mm to 2 mm said method including successively :
 - a) a step of selecting an active substance and a thermoplastic material, including at least one polymer excipient and at least one plasticizer,
 - b) a step of forming a mixture of the active substance and the thermoplastic material,
 - c) a step of introducing the said mixture into the kneading area of an extruding machine,

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- d) a step of extruding the said mixture, inside the extruding machine comprising a kneading area, without solvent at a controlled temperature to produce at least one extruded filament or extrudate and
 - e) a step of chopping the extruded filament into particles,
- the improvement consisting in providing between steps b) and c) a step of maintaining the mixture of the active substance and of the thermoplastic material in an oven at a temperature and for a time respectively selected in the range from 20 to 70C and in the range from 30 minutes to 150 hours causing thus the maturing of the mixture, whereby it becomes possible to store the said mixture for up to 7 days before extruding it, the active principle release curve of the particles obtained through extrusion from said mixture being stabilized and presenting a kinetics slower than that obtained with particles of same composition extruded immediately after making up the mixture with no maturing step, due to which the particles obtained by the method including the maturing step introduce into the organism an increased quantity of active substance and at an equivalent rate without increasing the volume of a tablet incorporating said particles.